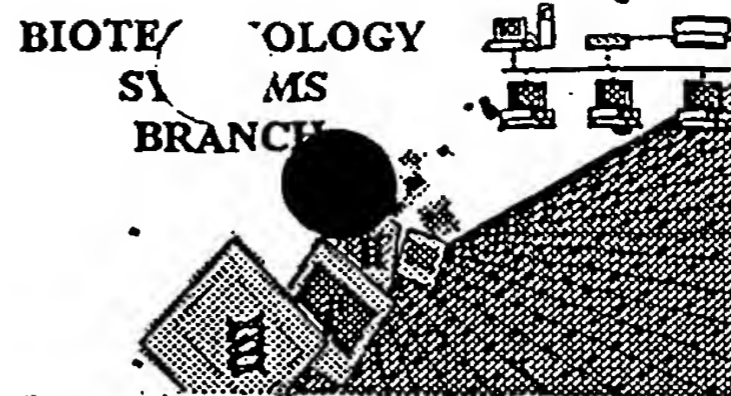


RAW SEQUENCE LISTING **ERROR REPORT**



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/070,387
Source: PCT10
Date Processed by STIC: 3-21-2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

Raw Sequence Listing Error Summary .

ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 101070, 38.7

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line. This may occur if your file
 Wrapped Aminos was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will
 prevent "wrapping."

- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.

- 3 Misaligned Amino The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers;
 Numbering use space characters, instead.

- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please
 ensure your subsequent submission is saved in ASCII text.

- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules,
 each n or Xaa can only represent a single residue. Please present the maximum number of each
 residue having variable length and indicate in the <220>-<223> section that some may be missing.

- 6 PatentIn 2.0 A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
 "bug" sequences(s) . Normally, PatentIn would automatically generate this section from the
 previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to
 the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for
 Artificial or Unknown sequences.

- 7 Skipped Sequences Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 (OLD RULES) (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

- 8 Skipped Sequences Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
 (NEW RULES) <210> sequence id number
 <400> sequence id number
 000

- 9 ✓ Use of n's or Xaa's Use of n's and/or Xaa's have been detected in the Sequence Listing.
 (NEW RULES) Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

- 10 Invalid <213> Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or
 Response scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or
 is Artificial Sequence

- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or
 "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)

- 12 PatentIn 2.0 Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file,
 "bug" resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence
 listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.



PCT10

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/070,387

DATE: 03/21/2002

TIME: 14:51:31

Input Set : A:\EP.txt

Output Set: N:\CRF3\03212002\J070387.raw

3 <110> APPLICANT: Meiji Seika Kaisha, Ltd.
5 <120> TITLE OF INVENTION: Cyclic depsipeptide synthetase and its gene and mass
duction system of
6 cyclic
7 depsipeptide
9 <130> FILE REFERENCE: 127184
> 11 <140> CURRENT APPLICATION NUMBER: US/10/070,387
> 11 <141> CURRENT FILING DATE: 2002-03-06
11 <150> PRIOR APPLICATION NUMBER: JP 253040/1999
12 <151> PRIOR FILING DATE: 1999-09-07
14 <150> PRIOR APPLICATION NUMBER: JP 104291/2000
15 <151> PRIOR FILING DATE: 2000-04-06
17 <160> NUMBER OF SEQ ID NOS: 21
19 <170> SOFTWARE: PatentIn Ver. 2.1

Does Not Comply
Corrected Diskette Needed
See Additional Page 1

RORED SEQUENCES

868 <210> SEQ ID NO: 2
869 <211> LENGTH: 3210
870 <212> TYPE: PRT
871 <213> ORGANISM: Mycelia sterilia
873 <400> SEQUENCE: 2
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878 20 25 30
880 Asp Asn Leu Tyr Glu Gln Ala Thr Arg His Phe Gly Leu Ser Arg Asp
881 35 40 45
883 Lys Ile Glu Asn Val Leu Pro Cys Thr Ser Phe Gln Cys Asp Val Ile
884 50 55 60
886 Asp Cys Ala Val Asp Asp Arg Arg His Ala Ile Gly His Val Val Tyr
887 65 70 75 80
889 Asp Ile Pro Asn Thr Val Asp Ile Gln Arg Leu Ala Ala Ala Trp Lys
890 85 90 95
892 Glu Val Val Arg Gln Thr Pro Ile Leu Arg Thr Gly Ile Phe Thr Ser
893 100 105 110
895 Glu Thr Gly Asp Ser Phe Gln Ile Val Leu Lys Glu Gly Cys Leu Pro
896 115 120 125
898 Trp Met Tyr Ala Thr Cys Leu Gly Met Lys Gly Ala Val Ile Gln Asp
899 130 135 140
901 Glu Ala Val Ala Ala Met Thr Gly Pro Arg Cys Asn Arg Tyr Val Val
902 145 150 155 160
904 Leu Glu Asp Pro Ser Thr Lys Gln Arg Leu Leu Ile Trp Thr Phe Ser

RAW SEQUENCE L NG
PATENT APPLICATION: US/10/070,387

DATE: 1/2002
TIME: 14:51:32

Input Set : A:\EP.txt

Output Set: N:\CRF3\03212002\J070387.raw

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910	Leu	Thr	Val	Tyr	Asp	Gly	Arg	Asp	Val	Glu	Cys	Pro	Arg	Ile	Lys	Asp
911			195					200					205			
913	Thr	Glu	His	Val	Ser	Arg	Phe	Trp	Gln	Gln	His	Phe	Glu	Gly	Leu	Asp
914		210					215					220				
916	Ala	Ser	Val	Phe	Pro	Leu	Leu	Pro	Ser	His	Leu	Thr	Val	Cys	Asn	Pro
917	225					230					235					240
919	Asn	Ala	Arg	Ala	Glu	His	His	Ile	Ser	Tyr	Thr	Gly	Pro	Val	Gln	Arg
920					245					250					255	
922	Lys	Trp	Ser	His	Thr	Ser	Ile	Cys	Arg	Ala	Ala	Leu	Ala	Val	Leu	Leu
923				260					265					270		
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932	305					310					315					320
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937	Phe	Glu	His	Ala	Gly	Leu	Arg	Asn	Ile	Arg	Arg	Thr	Gly	Asp	Asp	Gly
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940	Ser	Ala	Ala	Cys	Gly	Phe	Gln	Thr	Val	Leu	Leu	Val	Thr	Asp	Gly	Asp
941			355					360					365			
943	Ala	Pro	Lys	Thr	Pro	Gly	Ser	Val	Leu	His	Arg	Ser	Val	Glu	Glu	Ser
944		370					375					380				
946	Asp	Arg	Phe	Met	Pro	Cys	Ala	Asn	Arg	Ala	Leu	Leu	Leu	Asp	Cys	Gln
947	385					390				395						400
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950				405						410					415	
952	Ile	Asp	Pro	Arg	Gln	Met	Ser	Arg	Phe	Leu	Arg	Gln	Leu	Gly	Tyr	Leu
953				420					425					430		
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959	Asp	Val	Val	Thr	Ala	Glu	Asp	Cys	Ala	Glu	Ile	Glu	Lys	Trp	Asn	Ser
960		450					455					460				
962	Glu	Arg	Leu	Thr	Met	Gln	Asp	Ala	Leu	Ile	His	Asp	Thr	Ile	Ser	Lys
963	465					470				475						480
965	Trp	Ala	Ala	Gly	Asp	Pro	Asn	Lys	Ala	Ala	Val	Phe	Ala	Trp	Asp	Gly
966				485					490					495		
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969			500					505					510			
971	Tyr	Ile	Gln	Ser	Leu	Asp	Leu	Arg	Pro	Gly	Gln	Ala	Ile	Leu	Pro	Leu
972			515					520					525			
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975		530					535					540				
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RAW SEQUENCE ID: [REDACTED]
PATENT APPLICATION: US/10/070,387

DATE: 3/21/2002
TIME: 14:51:32

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Output Set: N:\CRF3\03212002\J070387.raw

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984				580					585						590	
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987			595					600					605			
989	Leu	Lys	Ala	Thr	Val	Lys	Pro	Gln	Asp	Leu	Ala	Tyr	Val	Ile	Phe	Thr
990		610					615					620				
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993	625					630					635					640
995	Phe	Val	Ser	Cys	Ala	Met	Lys	Phe	Gly	Pro	Ala	Leu	Gly	Met	Asp	Glu
996				645					650						655	
998	His	Thr	Arg	Ala	Leu	Gln	Phe	Ala	Ser	Tyr	Ala	Phe	Gly	Ala	Cys	Leu
999				660					665						670	
1001	Val	Glu	Val	Val	Thr	Ala	Leu	Met	His	Gly	Gly	Cys	Val	Cys	Ile	Pro
1002			675					680					685			
1004	Ser	Asp	Asp	Asp	Arg	Leu	Asn	Asn	Val	Pro	Glu	Phe	Ile	Lys	Arg	Ala
1005		690					695					700				
1007	Gln	Val	Asn	Trp	Val	Ile	Leu	Thr	Pro	Ser	Tyr	Ile	Gly	Thr	Phe	Gln
1008	705					710					715					720
1010	Pro	Glu	Asp	Val	Pro	Gly	Leu	Gln	Thr	Leu	Val	Leu	Val	Gly	Glu	Pro
1011					725					730					735	
1013	Ile	Ser	Ala	Ser	Ile	Arg	Asp	Thr	Trp	Ala	Ser	Gln	Val	Arg	Leu	Leu
1014				740					745						750	
1017	Asn	Ala	Tyr	Gly	Gln	Ser	Glu	Ser	Ser	Thr	Met	Cys	Ser	Val	Thr	Glu
1018			755				760							765		
1020	Val	Ser	Pro	Leu	Ser	Leu	Glu	Pro	Asn	Asn	Ile	Gly	Arg	Ala	Val	Gly
1021		770					775					780				
1023	Ala	Arg	Ser	Trp	Ile	Ile	Asp	Pro	Asp	Glu	Pro	Asp	Arg	Leu	Ala	Pro
1024	785					790				795						800
1026	Ile	Gly	Cys	Ile	Gly	Glu	Leu	Val	Ile	Glu	Ser	Pro	Gly	Ile	Ala	Arg
1027					805					810					815	
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1030				820					825						830	
1032	Pro	Pro	Ala	Trp	Tyr	Pro	Ala	Gly	Lys	Leu	Ser	Asn	Ala	Phe	Lys	Phe
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1035	Tyr	Lys	Thr	Gly	Asp	Leu	Val	Arg	Tyr	Gly	Pro	Asp	Gly	Thr	Ile	Val
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1039	865					870				875						880
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1048	Thr	Val	Leu	Thr	Ala	Phe	Leu	Ile	Gly	Ser	Ser	Lys	Ser	Gly	Asp	Gly
1049			915						920					925		
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Input Set : A:\EP.txt

Output Set: N:\CRF3\03212002\J070387.raw

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1067 1010          1015          1020
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-> 1070 025          1030          1035          1040
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1073          1045          1050          1055
1075 Ala Arg Ser Ala Gly Ile Ala Leu Lys Val Ser Asp Ile Phe Gln Asn
1076          1060          1065          1070
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1079          1075          1080          1085
1081 Tyr Asn Leu Ile Pro Thr Thr Ala Tyr Ser Gly Pro Val Glu Gln Ser
1082 1090          1095          1100
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-> 1085 105          1110          1115          1120
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1094          1155          1160          1165
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-> 1100 185          1190          1195          1200
1102 Pro Phe Ile Leu Ala Cys Gln Ala Gly Trp Arg Val Ser Leu Ile Arg
1103          1205          1210          1215
1106 Leu Gly Glu Asp Asp His Ile Leu Ser Ile Val Met His His Ile Ile
1107          1220          1225          1230
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1110          1235          1240          1245
1112 Tyr Ser Ala Ala Leu Arg Gly Ser Asp Pro Leu Ser Val Val Ser Pro
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1119          1285          1290          1295
1121 Ala Asp Ser Ser Ala Ala Glu Phe Leu Thr Asp Phe Pro Arg Pro Asn
1122          1300          1305          1310
1124 Ile Leu Ser Gly Glu Ala Gly Ser Val Pro Val Thr Ile Glu Gly Glu
1125          1315          1320          1325
1127 Leu Tyr Glu Arg Leu Gln Glu Phe Cys Lys Val Glu Gln Met Thr Pro
1128 1330          1335          1340
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Amino Acid
numbers, > 999
on the left hand
margin, must
start on the
left side of the
amino acid
3 letter code
and proceed
in. The number
may not overlap
the next 3 letter
amino acid code

The type of errors shown exist throughout
the Sequence Listing. Please check subsequent
sequences for similar errors.

Input Set : A:\EP.txt
Output Set: N:\CRF3\03212002\J070387.raw

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1356 Ile Val Val Ile Asp Gln Met Pro Leu Asn Ala Asn Gly Lys Val Asp
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1363 2565 2570 2575
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1366 2580 2585 2590
1368 Val Asn Asp His Phe Phe Gln Leu Gly Gly His Ser Leu Leu Ala Thr
1369 2595 2600 2605
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1374 Arg Asp Val Phe Asp Gln Pro Val Ile Ser Asp Leu Ala Val Thr Leu
-> 1375 625 2630 2635 2640
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1378 2645 2650 2655
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1381 2660 2665 2670
1383 Met Glu Ala Val Leu Cys Lys Glu Phe Ala Asp Val Leu Gly Val Glu
1384 2675 2680 2685
1386 Val Ser Ala Thr Asp Ser Phe Phe Asp Leu Gly Gly His Ser Leu Met
1387 2690 2695 2700
1389 Ala Thr Lys Leu Ala Ala Arg Ile Ser Arg Arg Leu Asp Val Pro Val
-> 1390 705 2710 2715 2720
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1403 2770 2775 2780
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-> 1406 785 2790 2795 2800
1408 Leu Leu Asn Pro Val Thr Gly Lys Pro Arg Ser Pro Thr Pro Phe His
1409 2805 2810 2815
1411 Ile Asp Phe Pro Pro Asp Ala Asp Cys Ala Ser Leu Met Arg Ala Cys
1412 2820 2825 2830
1414 Ala Ser Leu Ala Lys His Phe Asp Ile Phe Arg Thr Val Phe Leu Glu
1415 2835 2840 2845
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-> 1421 865 2870 2875 2880
1423 Phe Leu Asp Val Asp Ala Glu Lys Pro Ile Arg Leu Gly Gln Pro Leu
1424 2885 2890 2895
1426 Ile Arg Ile Ala Ile Leu Glu Lys Pro Gly Ser Thr Leu Arg Val Ile
1427 2900 2905 2910

see page 4

RAW SEQUENCE ING
PATENT APPLICATION: US/10/070,387

DATE: 21/2002
TIME: 14:51:32

Input Set : A:\EP.txt
Output Set: N:\CRF3\03212002\J070387.raw

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1432 Leu His Ser Leu His Ile Leu Phe Phe Gly Gly Ser Leu Pro Pro Pro
1433 2930 2935 2940
1435 Pro Lys Phe Ala Gly Tyr Met Gln His Val Ala Ser Ser Arg Arg Glu
-> 1436 945 2950 2955 2960
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1439 2965 2970 2975
1441 Ile Lys Gly Asn Asn Asn Thr Thr Pro Pro Pro Pro Gln Gln Gln
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1461 3075 3080 3085
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1464 3090 3095 3100
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-> 1467 105 3110 3115 3120
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1470 3125 3130 3135
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1478 Glu Ser Glu Pro Asp Gly Asp Asp Leu Arg Val Thr Val Val Ala Asn
1479 3170 3175 3180
1481 Arg Arg Leu Cys Asp Glu Glu Arg Leu Lys Arg Met Leu Glu Glu Leu
-> 1482 185 3190 3195 3200
1484 Cys Gly Asn Ile Arg Ala Leu Ala Leu Val
1485 3205 3210

see page 4

<210> 5
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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:primer for cyclic depsipeptide synthetase gene

<400> 5
 tggacnwsna tgtaygaygg 20

<210> 6
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:primer for cyclic depsipeptide synthetase gene

<400> 6
 gtnggraart aytnacnac 20

All 'n' must have feature with numeric identifiers <220>-<223>. See item #9 on error summary sheet.

VERIFICATION  ARY
PATENT APPLICATION: US/10/070,387

DATE: 1/2002
TIME: 14:51:33

Input Set : A:\EP.txt

Output Set: N:\CRF3\03212002\J070387.raw

11 M:270 C: Current Application Number differs, Replaced Current Application No
11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
38 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
42 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
46 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
50 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
54 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
58 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
62 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
66 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
70 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
74 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
78 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
82 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
86 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
91 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
95 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
99 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
103 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
107 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
111 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
115 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
120 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
124 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
128 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
132 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
136 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
140 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
144 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
149 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
153 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
157 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
161 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
165 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
169 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
173 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
178 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
182 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
186 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
190 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
194 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
198 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
202 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
207 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
211 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
215 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
219 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
223 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/070,387

DATE: 21/2002
TIME: 51:33

Input Set : A:\EP.txt
Output Set: N:\CRF3\03212002\J070387.raw

:227 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
:231 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
:236 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
:240 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
:1070 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2
:332 Repeated in SeqNo=2
:1523 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:5
:1523 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:5
:1523 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
:1536 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:6
:1536 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:6
:1536 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6

RAW SEQUENCE EDITING
PATENT APPLICATION: US/10/070,387

DATE: 21/2002
TIME: 14:51:32

Input Set : A:\EP.txt

Output Set: N:\CRF3\03212002\J070387.raw

```
1280 Asp Asp Thr Met Arg Thr Leu Leu Asp Gly Gln Ala Pro Gly His Val
1281      2130      2135      2140
1283 Leu Glu Ile Gly Thr Gly Ser Gly Met Val Leu Phe Asn Leu Gly Ala
-> 1284 145      2150      2155      2160
1286 Gly Leu Gln Ser Tyr Val Gly Leu Glu Pro Ser Arg Ser Ala Ala Thr
1287      2165      2170      2175
1289 Phe Val Thr Lys Ala Ile Asn Ser Thr Pro Ala Leu Ala Gly Lys Ala
1290      2180      2185      2190
1292 Glu Val His Val Gly Thr Ala Thr Asp Ile Asn Arg Leu Arg Gly Leu
1293      2195      2200      2205
1295 Arg Pro Asp Leu Val Val Leu Asn Ser Val Val Gln Tyr Phe Pro Thr
1296      2210      2215      2220
1298 Pro Glu Tyr Leu Leu Glu Val Val Glu Ser Leu Val Arg Ile Pro Gly
-> 1299 225      2230      2235      2240
1301 Val Lys Arg Val Val Phe Gly Asp Ile Arg Ser His Ala Thr Asn Arg
1302      2245      2250      2255
1304 His Phe Leu Ala Ala Arg Ala Leu His Ser Leu Gly Ser Lys Ala Thr
1305      2260      2265      2270
1307 Lys Asp Ala Ile Arg Gln Lys Met Thr Glu Met Glu Glu Arg Glu Glu
1308      2275      2280      2285
1310 Glu Leu Leu Val Asp Pro Ala Phe Phe Thr Ala Leu Leu Gln Gly Gln
1311      2290      2295      2300
1313 Leu Ala Asp Arg Ile Lys His Val Glu Ile Leu Pro Lys Asn Met Arg
-> 1314 305      2310      2315      2320
1316 Ala Thr Asn Glu Leu Ser Ala Tyr Arg Tyr Thr Ala Val Ile His Val
1317      2325      2330      2335
1319 Arg Gly Pro Glu Glu Gln Ser Arg Pro Val Tyr Pro Ile Gln Val Asn
1320      2340      2345      2350
1322 Asp Trp Ile Asp Phe Gln Ala Ser Arg Ile Asp Arg Arg Ala Leu Leu
1323      2355      2360      2365
1325 Arg Leu Leu Gln Arg Ser Ala Asp Ala Ala Thr Val Ala Val Ser Asn
1326      2370      2375      2380
1328 Ile Pro Tyr Ser Lys Thr Ile Val Glu Arg His Val Val Glu Ser Leu
-> 1329 385      2390      2395      2400
1331 Asp Asn Asn Asn Arg Glu Asn Thr His Arg Ala Pro Asp Gly Ala Ala
1332      2405      2410      2415
1334 Trp Ile Ser Ala Val Arg Ser Lys Ala Glu Arg Cys Thr Ser Leu Ser
1335      2420      2425      2430
1338 Val Thr Asp Leu Val Gln Leu Gly Glu Glu Ala Gly Phe Arg Val Glu
1339      2435      2440      2445
1341 Val Ser Ala Ala Arg Gln Trp Ser Gln Ser Gly Ala Leu Asp Ala Val
1342      2450      2455      2460
1344 Phe His Arg Tyr Asn Leu Pro Thr Gln Ser Asn Ser Arg Val Leu Ile
-> 1345 465      2470      2475      2480
1347 Gln Phe Pro Thr Glu Asp Gly Gln Thr Arg Arg Ser Ala Thr Leu Thr
1348      2485      2490      2495
1350 Asn Arg Pro Leu Gln Arg Leu Gln Ser Arg Arg Phe Ala Ser Gln Ile
1351      2500      2505      2510
1353 Arg Glu Gln Leu Lys Ala Val Leu Pro Ser Tyr Met Ile Pro Ser Arg
```

Input Set : A:\EP.txt
Output Set: N:\CRF3\03212002\J070387.raw

```
--> 1130 Phe Ala Val Leu Leu Gly Ala Phe Arg Ala Thr His Tyr Arg Leu Thr
1131 345 1350 1355 1360
1133 Gly Ala Glu Asp Ser Ile Ile Gly Thr Pro Ile Ala Asn Arg Asn Arg
1134 1365 1370 1375
1136 Gln Glu Leu Glu Asn Met Ile Gly Phe Phe Val Asn Thr Gln Cys Met
1137 1380 1385 1390
1139 Arg Ile Thr Val Asp Gly Asp Asp Thr Phe Glu Ser Leu Val Arg Gln
1140 1395 1400 1405
1142 Val Arg Thr Thr Ala Thr Ala Ala Phe Glu His Gln Asp Val Pro Phe
1143 1410 1415 1420
1145 Glu Arg Val Val Thr Ala Leu Leu Pro Arg Ser Arg Asp Leu Ser Arg
--> 1146 425 1430 1435 1440
1148 Asn Pro Leu Ala Gln Leu Thr Phe Ala Leu His Ser Gln Gln Asp Leu
1149 1445 1450 1455
1151 Gly Lys Phe Glu Leu Glu Gly Leu Val Ala Glu Pro Val Ser Asn Lys
1152 1460 1465 1470
1154 Val Tyr Thr Arg Phe Asp Val Glu Phe His Leu Phe Gln Glu Ala Gly
1155 1475 1480 1485
1157 Arg Leu Ser Gly Asn Val Ala Phe Ala Ala Asp Leu Phe Lys Pro Glu
1158 1490 1495 1500
1160 Thr Ile Ser Asn Val Val Ala Ile Phe Phe Gln Ile Leu Arg Gln Gly
--> 1161 505 1510 1515 1520
1164 Ile Arg Gln Pro Arg Thr Pro Ile Ala Val Leu Pro Leu Thr Asp Gly
1165 1525 1530 1535
1167 Leu Ala Asp Leu Arg Ala Met Gly Leu Leu Glu Ile Glu Lys Ala Glu
1168 1540 1545 1550
1170 Tyr Pro Arg Glu Ser Ser Val Val Asp Val Phe Arg Lys Gln Val Ala
1171 1555 1560 1565
1173 Ala His Pro His Ala Phe Ala Val Val Asp Ser Ala Ser Arg Leu Thr
1174 1570 1575 1580
1176 Tyr Ala Asp Leu Asp Arg Gln Ser Asp Gln Leu Ala Thr Trp Leu Gly
--> 1177 585 1590 1595 1600
1179 Arg Arg Asn Met Thr Ala Glu Thr Leu Val Gly Val Leu Ala Pro Arg
1180 1605 1610 1615
1182 Ser Cys Gln Thr Val Val Ala Ile Leu Gly Ile Leu Lys Ala Asn Leu
1183 1620 1625 1630
1185 Ala Tyr Leu Pro Leu Asp Val Asn Cys Pro Thr Ala Arg Leu Gln Thr
1186 1635 1640 1645
1188 Ile Leu Ser Thr Leu Asn Arg His Lys Leu Val Leu Leu Gly Ser Asn
1189 1650 1655 1660
1191 Ala Thr Thr Pro Asp Val Gln Ile Pro Asp Val Glu Leu Val Arg Ile
--> 1192 665 1670 1675 1680
1194 Ser Asp Ile Leu Asp Arg Pro Ile Asn Gly Gln Ala Lys Leu Asn Gly
1195 1685 1690 1695
1197 His Thr Lys Ser Asn Gly Tyr Ser Lys Pro Asn Gly Tyr Thr His Leu
1198 1700 1705 1710
1200 Lys Gly Tyr Ser Asn Leu Asn Gly Tyr Ser Lys Gln Asn Gly Tyr Ala
1201 1715 1720 1725
1203 Gln Leu Asn Gly His Arg Glu Arg Asn Asn Tyr Leu Asp Leu Asn Gly
```

See page 4

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/070,387

DATE: 3/21/2002

TIME: 15:32

Input Set : A:\EP.txt

Output Set: N:\CRF3\03212002\J070387.raw

1204 1730 1735 1740
1206 His Ser Leu Leu Asn Gly Asn Ser Asp Ile Thr Thr Ser Gly Pro Ser
-> 1207 745 1750 1755 1760
1209 Ala Thr Ser Leu Ala Tyr Val Ile Phe Thr Ser Gly Ser Thr Gly Lys
1210 1765 1770 1775
1212 Pro Lys Gly Val Met Val Glu His Arg Ser Ile Ile Arg Leu Ala Lys
1213 1780 1785 1790
1215 Lys Asn Arg Ile Ile Ser Arg Phe Pro Ser Val Ala Lys Val Ala His
1216 1795 1800 1805
1218 Leu Ser Asn Ile Ala Phe Asp Ala Ala Thr Trp Glu Met Phe Ala Ala
1219 1810 1815 1820
1222 Leu Leu Asn Gly Gly Thr Leu Val Cys Ile Asp Tyr Met Thr Thr Leu
-> 1223 825 1830 1835 1840
1225 Asp Ser Lys Thr Leu Glu Ala Ala Phe Ala Arg Glu Gln Ile Asn Ala
1226 1845 1850 1855
1228 Ala Leu Leu Thr Pro Ala Leu Leu Lys Gln Cys Leu Ala Asn Ile Pro
1229 1860 1865 1870
1231 Thr Thr Leu Gly Arg Leu Ser Ala Leu Val Ile Gly Gly Asp Arg Leu
1232 1875 1880 1885
1234 Asp Gly Gln Asp Ala Ile Ala Ala His Ala Leu Val Gly Ala Gly Val
1235 1890 1895 1900
1237 Tyr Asn Ala Tyr Gly Pro Thr Glu Asn Gly Val Ile Ser Thr Ile Tyr
-> 1238 905 1910 1915 1920
1240 Asp Ile Thr Lys Asn Asp Ser Phe Ile Asn Gly Val Pro Ile Gly Cys
1241 1925 1930 1935
1243 Ala Ile Ser Asn Ser Gly Ala Tyr Ile Thr Asp Pro Asp Gln Gln Leu
1244 1940 1945 1950
1246 Val Pro Pro Gly Val Met Gly Glu Leu Val Val Thr Gly Asp Gly Leu
1247 1955 1960 1965
1249 Ala Arg Gly Tyr Thr Asp Pro Ala Leu Asp Ala Gly Arg Phe Val Gln
1250 1970 1975 1980
1252 Ile Met Ile Asn Asp Lys Ala Val Arg Ala Tyr Arg Thr Gly Asp Arg
-> 1253 985 1990 1995 2000
1255 Ala Arg Tyr Arg Val Gly Asp Gly Gln Ile Glu Phe Phe Gly Arg Met
1256 2005 2010 2015
1258 Asp Gln Gln Val Lys Ile Arg Gly His Arg Ile Glu Pro Ala Glu Val
1259 2020 2025 2030
1261 Glu Arg Ala Ile Leu Asp Gln Asp Ser Ala Arg Asp Ala Val Val Val
1262 2035 2040 2045
1264 Ile Arg His Gln Glu Gly Glu Glu Pro Glu Met Val Gly Phe Val Ala
1265 2050 2055 2060
1267 Thr His Gly Asp His Ser Ala Glu Gln Glu Glu Ala Asp Asp Gln Val
-> 1268 065 2070 2075 2080
1270 Glu Gly Trp Lys Asp Phe Phe Glu Ser Asn Thr Tyr Ala Asp Met Asp
1271 2085 2090 2095
1273 Thr Ile Gly Gln Ser Ala Ile Gly Asn Asp Phe Thr Gly Trp Thr Ser
1274 2100 2105 2110
1276 Met Tyr Asp Gly Ser Glu Ile Asn Lys Ala Glu Met Gln Glu Trp Leu
1277 2115 2120 2125

See page 4